ABSTRACT

be signed to a message digest function to produce a digest of the data to be signed, transmitting the message digest to a small, mobile transaction device which contains a secret key and a user's PIN code, determining whether a user's PIN code is correct and, if it is, hashing the digest as a function of said secret key, returning the transformed message digest to a service provider, digesting and hashing the original data at the service provider using the same message digest function and secret key, and determining whether the hashed message digest at the service provider matches the hashed message digest received from the transaction device.